constant layer leaning angle, where the liquid-crystal layer comprises at least one compound of the formula (I) below.

Expressly included is the advantageous use of the novel materials and mixtures for active-matrix displays, antiferroelectric displays and twisted smectic displays.

In particular, the object is achieved by a chiral smectic active-matrix display containing a liquid-crystal layer in the form of a monostable monodomain having a tilt angle which is virtually constant over a broad temperature range, and a virtually constant layer leaning angle, where the liquid-crystal layer comprises at least one compound of the formula (I) below.

The active-matrix display contains a chiral smectic liquid-crystal mixture comprising at least one compound of the general formula (I)

$$R^1\text{-}(A^1\text{-}M^1)_a\text{-}(A^2\text{-}M^2)_b\text{-}A^3\text{-}X\text{-}B^1\text{-}(B^2)_c\text{-}R^2 \qquad (I)$$

where the symbols are as defined below:

R^1, R^2 are, independently of one another, identical or different and are each

a) hydrogen, fluorine or CN
a straight-chain or branched alkenyl, alkenyloxy, alkyl or alkyloxy radical (with or without asymmetric carbon atoms) having 2 to 16 carbon atoms, where

b1) one or two nonterminal $-CH_2-$ groups may be replaced by -O-, -OC(=O)-, -(C=O), -C(=O)O-, $-Si(CH_3)_2-$, -CH(Cl)- and/or one or two $-CH_2-$ groups may be replaced by -CH=CH- or -C≡C-

and one or more H atoms may be replaced by F and/or

b2) one or more $-CH_2-$ groups may be replaced by phenylene-1,4-diyl (unsubstituted, monosubstituted or disubstituted by F), phenylene-1,3-diyl (unsubstituted, monosubstituted or disubstituted by F), cyclohexane-1,4-diyl (unsubstituted or monosubstituted by F or CN) or cyclopropane-1,2-diyl

and one or more H atoms may be replaced by F

with the provisos that only one of the radicals R^1, R^2 can be hydrogen, F or CN and that two adjacent $-CH_2-$ groups cannot be replaced by -O-

M^1, M^2 are, independently of one another, identical or different and are each -C(=O)O-, -OC(=O)-, $-CH_2O-$, $-OCH_2-$, $-CF_2O-$, $-OCF_2-$, $-CH_2CH_2-$, $-CF_2CF_2-$, -CH=CH-, -CH=CF-, -CF=CF-, -C≡C-, $-CH_2CH_2C(=O)O-$, $-OC(=O)CH_2CH_2-$, $-(CH_2)_4-$, $-OCH_2CH_2CH_2-$, $-CH_2CH_2CH_2O-$,$-OCH_2CF_2CH_2-$, $-CH_2CF_2CH_2O-$ or a single bond

A^1, A^2, A^3 are, independently of one another, identical or different and are each cyclohexane-1,4-diyl (unsubstituted or monosubstituted by F, CH_3, CN), cyclohex-1-ene-1,4-diyl, cyclohex-2-ene-1,4-diyl, 2-oxocyclohexane-1,4-diyl, 2-cyclohexen-1-one-3,6-diyl, 1-alkyl-1-silacyclohexane-1,4-diyl, bicyclo[2.2.2]octane-1,4-diyl, spiro[4.5]-decane-2,8-diyl, spiro[5.5]undecane-3,9-diyl, phenylene-1,4-diyl (unsubstituted, monosubstituted or disubstituted by CN, CH_3, CF_3, OCH_3, unsubstituted, monosubstituted, disubstituted, trisubstituted or tetrasubstituted by F), phenylene-1,3-diyl (unsubstituted, monosubstituted or disubstituted by CN, CH_3, CF_3, OCF_3, unsubstituted, monosubstituted, disubstituted, trisubstituted or tetrasubstituted by F), thiophene-2,5-diyl, thiophene-2,4-diyl, (1,3,4)-oxadiazole-2,5-diyl, (1,3,4)-thiadiazole-2,5-diyl, 1,3-thiazole-2,5-diyl, 1,3-thiazole-2,4-diyl, (1,3)-oxazole-2,5-diyl, isoxazole-2,5-diyl, indane-2,6-diyl, naphthalene-2,6-diyl (unsubstituted, monosubstituted or disubstituted by F or CN), 1,2,3,4-tetrahydronaphthalene-2,6-diyl, decaline-2,6-diyl, pyrimidine-2,5-diyl (unsubstituted or monosubstituted by F), pyridine-2,5-diyl (unsubstituted, monosubstituted or disubstituted by F), pyrazine-2,5-diyl (unsubstituted or monosubstituted by F), pyridazine-3,6-diyl, quinoline-2,6-diyl, quinoline-3,7-diyl, isoquinoline-3,7-diyl, quinazoline-2,6-diyl, 5,6,7,8-tetrahydroquinazoline-2,6-diyl, quinoxaline-2,6-diyl, 1,3-dioxane-2,5-diyl (unsubstituted or monosubstituted by CN), benzothiazole-2,6-diyl, piperidine-2,4-diyl, piperazine-1,4-diyl

B^1 is cyclohexane-1,4-diyl (unsubstituted, monosubstituted or disubstituted by F, CH_3, CN), perfluorocyclohexane-1,4-diyl, cyclohex-1-ene-1,4-diyl, cyclohex-2-ene-1,4-diyl, 1-alkyl-1-silacyclohexane-1,4-diyl, bicyclo[2.2.2]octane-1,4-diyl, cyclopentane-1,3-diyl, cycloheptane-1,4-diyl, tetrahydrofuran-2,5-diyl, tetrahydrofuran-2,4-diyl, phenylene-1,4-diyl (unsubstituted, monosubstituted or

disubstituted by CN, CH_3, CF_3, OCF_3, unsubstituted, monosubstituted, disubstituted, trisubstituted or tetrasubstituted by F), phenylene-1,3-diyl (unsubstituted, monosubstituted or disubstituted by CN, CH_3, CF_3, OCF_3, unsubstituted, monosubstituted, disubstituted or trisubstituted by F), thiophene-2,5-diyl (unsubstituted or monosubstituted by F), thiophene-2,4-diyl (unsubstituted or monosubstituted by F), 1,3-thiazol-2,5-diyl (unsubstituted or monosubstituted by F), 1,3-thiazol-2,4-diyl (unsubstituted or monosubstituted by F), (1,3,4)-thiadiazol-2,5-diyl, 1,3-dioxane-2,5-diyl (unsubstituted or monosubstituted by CN), tetrahydropyran-2,5-diyl, 6,6-difluorotetra-hydropyran-2,5-diyl, 6,6-difluoro-2,3-dihydro-6H-pyran-2,5-diyl, 6-fluoro-3,4-dihydro-2H-pyran-2,5-diyl, piperidine-1,4-diyl, piperazine-1,4-diyl, pyrimidine-2,5-diyl (unsubstituted or monosubstituted by F), pyridine-2,5-diyl (unsubstituted or monosubstituted by F), 1,2,3,4-tetrahydronaphthalene-2,6-diyl, decaline-2,6-diyl

B^2 is cyclohexane-1,4-diyl (unsubstituted, monosubstituted or disubstituted by F, CH_3, CN), cyclohex-1-ene-1,4-diyl (unsubstituted or monosubstituted by F), cyclohex-2-ene-1,4-diyl, 1-alkyl-1-silacyclohexane-1,4-diyl, bicyclo[2.2.2]octane-1,4-diyl, phenylene-1,4-diyl (unsubstituted, monosubstituted or disubstituted by CN, CH_3, CF_3, OCF_3, unsubstituted, monosubstituted, disubstituted, trisubstituted or tetrasubstituted by F), phenylene-1,3-diyl (unsubstituted, monosubstituted or disubstituted by CN, CH_3, CF_3, OCF_3, unsubstituted, monosubstituted, disubstituted or trisubstituted by F), thiophene-2,5-diyl, thiophene-2,4-diyl, 1,3-thiazole-2,5-diyl, 1,3-thiazole-2,4-diyl, (1,3,4)-thiadiazole-2,5-diyl, 1,3-dioxane-2,5-diyl (unsubstituted or monosubstituted by CN), tetrahydrofuran-2,5-diyl, tetrahydropyran-2,5-diyl, 6,6-difluorotetrahydropyran-2,5-diyl, 6,6-difluoro-2,3-dihydro-6H-pyran-2,5-diyl, 6-fluoro-3,4-dihydro-2H-pyran-2,5-diyl, pyrimidine-2,5-diyl (unsubstituted or monosubstituted F), pyridine-2,5-diyl (unsubstituted or monosubstituted F), indane-2,6-diyl, piperidine-1,4-diyl, piperazine-1,4-diyl, pyrimidine-2,5-diyl (unsubstituted or monosubstituted by F)

X is $-(CH_2)_n-$, where

a) one or two $-CH_2-$ groups may be replaced by -O- or -C(=O)- and/or